OCXO2527L
Ultra-Low Phase Noise OCXO with Sine wave Output

Features and Benefits

Ultra-Low Phase noise OCXO
Sine wave output
12V Power supply
5 minutes max warm-up
25.8x25.8x12.7mm max

Description

OCXO2527L is Ultra-Low phase noise with Sine wave output OCXO

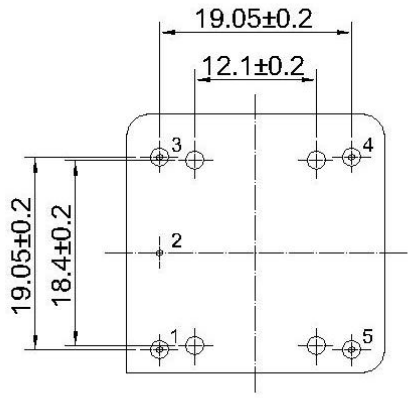
Typical Applications

Ref. for Microwave comm. System
signal analyzer Reference for internal synthesizers
SATCOM systems

Mechanical Drawing & Pin Connections

Drawing No: MD13022-2

Bottom View

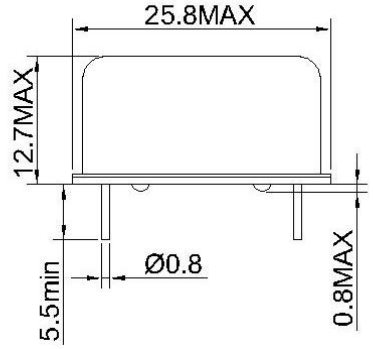


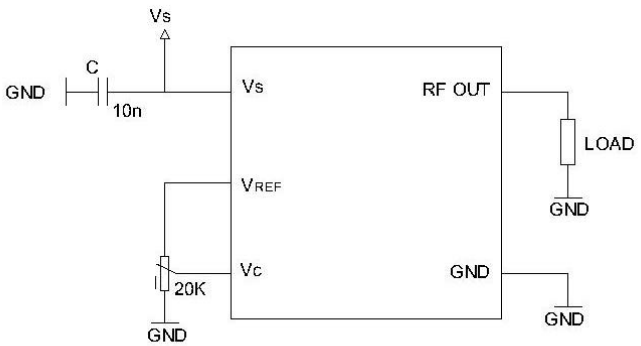
Pin Connections:

PIN #	Symbol	CONNECTION
1	RF OUT	RF Output
2	GND	Ground,case
3	Vc	Control Voltage(EFC)
4	VREF	Reference Voltage
5	Vs	Supply Voltage

Unit : mm

Side View





Specifications

OCXO Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Frequency Range	F_0		80		125	MHz	
Standard Frequencies				10.000/120.000		MHz	
RF Output							
Output Waveform				Sine wave			
Load	R_L	+/-5%		50		Ohm	
Output Level			+7			dBm	
Harmonics					-30	dBc	
Spurious					-90	dBc	
G-Sensitivity		Per Axis			1.0	ppb/g	
Power Supply							
Supply Voltage	Vcc		11.4	12.0	12.6	V	
Current Consumption(Steady State)	I_{Steady}	@ +25°C			150	mA	
Current Consumption(Warm-up)	$I_{Warm-up}$				350	mA	
Warm-up Time@+25°C		$\triangle f_{final}/f_0$<+/-0.1ppm		3	5	min	
Frequency Control*							
Electronic Frequency Control(EFC)			+/-1	+/-2		ppm	
Reference Output	V_{REF}			10.0		V	
EFC Voltage	Vc		0	$V_{REF}/2$	V_{REF}	V	
EFC Input Impedance			100			Kohm	
EFC Slope	$\triangle f/Vc$			Positive			
Frequency Stability							
Initial Tolerance @+25°C		Vc @ $V_{REF}/2$			+/-300	ppb	
Vs. Operating Temperature Range		Steady state			+/-25	ppb	For more information, Please consult sale
Vs. Supply Voltage Variation(Pushing)		Vs+/-5%			+/-10	ppb	
Vs. Load Change(Pulling)		Load+/-5%			+/-5	ppb	
Aging — Long Term Per Day		After 30days operation		+/-1	+/-2	ppb	
Aging — Long Term 1st Year		After 30days operation		+/-100	+/-200	ppb	

Phase Noise											
Offset	100MHz					120MHz					Unit
	A	B	C	D	E	A	B	C	D	E	
10Hz	-90	-95	-97	-100	-105	-85	-90	-95	-97	-100	dBc/Hz
100Hz	-125	130	-132	-135	-137	-118	-122	-125	-127	-130	dBc/Hz
1000Hz	-155	-158	-160	-162	-164	-148	-150	-153	-155	-157	dBc/Hz
10kHz	-165	-168	-170	-172	-174	-160	-165	-168	-170	-172	dBc/Hz
>=100kHz	-175	-175	-175	-175	-175	-175	-175	-175	-175	-175	dBc/Hz

Environmental	
Packing	Palette
Size	25.8x25.8x12.7mm max
Weight	20g max